

**ABSTRACT**

5 Compositions containing alpha interferon conjugated to a substantially non-antigenic polymer are disclosed in which at least about 30% of the conjugates include covalent attachment of the alpha interferon to the substantially non-antigenic polymer at a histidine. Also disclosed is a process for preparing the conjugates. The process includes contacting an alpha interferon with a succinimidyl carbonate-activated substantially non-antigenic polymer at a pH which is sufficient to facilitate covalent attachment of the polymer on a histidine of the alpha interferon.